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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/729,017

12/05/2003

Nick Huffman

HFMN.001A

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20995

7590

10/30/2006

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EXAMINER

LE, HUYEN D

ART UNIT

PAPER NUMBER

2615

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/729,017

Applicant(s)

HUFFMAN, NICK

Examiner

HUYEN D. LE

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 12-27 is/are pending in the application.
- 4a) Of the above claim(s) 5, 6 and 10 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 12-16 and 20-27 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 7-8 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 7 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Furukawa (U.S. patent 5,173,575).

Regarding claims 1, 7 and 17-19, Furukawa teaches a speaker system that comprises a primary enclosure (1) having an open upper end and a sealed lower end, a speaker driver (4), a port section (6, 8, 8a, 8b, 9).

As shown in the drawings, the port section comprises a duct (8) extending external to the enclosure (1), a port opening, and a transition region (also see figures 1, 6, 7, 8, 9). Furukawa further teaches the port section (8) that comprises dimensions designed such that select frequency components exiting the speaker system through the port section are in phase as claimed (see the drawings, and col. 1, lines 38-45 and lines 63-68 through col. 2, lines 1-21, col. 3, lines 29-34 and lines 54-58).

Regarding claim 3, as broadly claimed, Furukawa shows the transition region that has a first end and a second end as claimed. As shown in figures 7-8, the first end having a first opening that has dimensions substantially equal to an internal dimension of the opening in the

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primary enclosure, and a second end having a second opening that is substantially equal to an internal dimension of the port opening.

3. Claims 1, 3, 7 and 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Morkerken (U.S. patent 7,011,178).

Regarding claims 1, 7, 17-19, Furukawa teaches a speaker system that comprises a primary enclosure (2) having an open upper end and a sealed lower end, a speaker driver (1), a port section or the porting means (3).

As shown in the drawings, the port section comprises a duct or the porting means (3) extending external to the enclosure (2), a port opening, and a transition region (also see figure 1). Morkerken further teaches the port section or porting means (3) that comprises dimensions designed such that select frequency components exiting the speaker system through the port section are in phase or the porting means is tuned to a selected frequency to extend low frequency response as claimed (see the drawings and col. 1, lines 27-36, col. 5, lines 53-58, and col. 6, lines 21-29).

Regarding claim 3, as broadly claimed, Furukawa shows the transition region that has a first end and a second end as claimed. As shown in figures 7-8, the first end having a first opening that has dimensions substantially equal to an internal dimension of the opening in the primary enclosure, and a second end having a second opening that is substantially equal to an internal dimension of the port opening.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa (US patent 5,173,575) or Morkerken (U.S. patent 7,011,178).

Regarding claim 4, Furukawa or Morkerken teaches an enclosure (1 in Furukawa and 2 in Morkerken) and a cylindrical duct (8 in Furukawa and 23 in Morkerken). Furukawa or Morkerken does not specifically teach that the enclosure comprises a cylindrical shape as claimed. However, Furukawa or Morkerken does not restrict to the shape for the enclosure.

Therefore, it would have been obvious to one skilled in the art to provide any shape for the enclosure of Furukawa or Morkerken such as a cylindrical shape depending on the application and the desired frequency characteristics.

Regarding claim 8, Furukawa or Morkerken does not specifically teach that the speaker driver has a frequency range and a diaphragm dimension as claimed. However, Furukawa or Morkerken does not restrict to the frequency range and the dimension of the diaphragm.

Therefore, it would have been obvious to one skilled in the art to provide any frequency range and the dimensions for the diaphragm of Furukawa or Morkerken depending on the desired frequency characteristics.

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***Allowable Subject Matter***

6. Claims 9, 12-16, and 20-27 have been allowed.
7. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

8. Applicant's arguments with respect to claims 1, 3, 7-8 and 17-19 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUYEN D. LE whose telephone number is (571) 272-7502. The examiner can normally be reached on 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SINH TRAN can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



HL

October 24, 2006



**HUYEN LE**  
**PRIMARY EXAMINER**